

**Co-occurrence between macrophytes and macroinvertebrates: towards a new approach for the running waters quality evaluation?**

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**Supplementary Tab. 1.** Summary of both organic and inorganic microhabitats explored per site.

Site	Inorganic microhabitat						Organic microhabitat				
	AK	MA	ME	MIC	MS	PSA	MA	CPO	EM	SUB	TPL
A	1	1	1	2	2	-	-	2	-	1	-
B	-	2	1	2	3	-	-	-	-	1	1
C	-	2	-	2	3	-	-	1	-	1	1
D	-	4	-	-	4	-	-	-	-	-	2
E	1	2	-	1	2	-	1	-	-	2	1
F	-	1	-	2	3	-	1	-	-	3	-
G	-	3	-	1	4	-	-	-	1	1	-
H	1	1	-	3	3	-	-	-	-	2	-
I	-	2	-	4	2	-	-	-	-	1	1
J	1	2	1	1	2	-	-	-	-	2	1
K	3	-	-	2	1	2	-	-	1	1	-

AKA, akal (>2 mm to 2 cm); CPO, coarse particulated organic matter; EME, emergent macrophytes; HYG, hygropetric (water on solid substrate); MAA, macro-algae (filamentous algae, algal tufts); MAC, macrolithal (>20 cm to 40 cm); MEG, megalithal (>40 cm); MIC, microlithal (>2 cm to 6 cm); MSO, mesolithal (>6 cm to 20 cm); PSA, psammal (>6 µm to 2 mm); SUB, submerged macrophytes; TPL, living part of terrestrial plants. Sampling sites: A, *Filettino*; B, *Trevi nel Lazio*; C, *Jenne*; D, *Subiaco*; E, *Madonna della Pace*; F, *Anticoli Corrado*; G, *Vicovaro*; H, *Castel Madama*; I, *Tivoli*; J, *Lunghezza*; K, *Roma Nomentana*.

**Supplementary Tab. 2.** Complete list of macroinvertebrate and macrophyte taxa collected within the study area.

Macroinvertebrates	No. site in Oct 2008 / Jun 2009	Macrophytes	No. site in Oct 2008 / Jun 2009
Aeshnidae	1 / 0	<i>Alisma plantago-aquatica</i>	1 / 2
<i>Agapetus</i>	1 / 0	<i>Anabaena</i> sp.	1 / 3
<i>Amphinemura</i>	1 / 0	<i>Apium nodiflorum</i>	5 / 1
Ancylidae	1 / 0	<i>Audouinella hermannii</i>	1 / 0
Anthomyiidae	1 / 1	<i>Bangia atropurpurea</i>	1 / 5
Asellidae	8 / 4	<i>Batrachospermum</i>	1 / 1
Athericidae	6 / 5	<i>gelatinosum</i>	3 / 3
<i>Baetis alpinus</i>	6 / 4	<i>Berula erecta</i>	3 / 3
<i>Baetis muticus</i>	9 / 9	<i>Callitriche stagnalis</i>	0 / 1
<i>Baetis rhodani</i>	10 / 10	<i>Chara</i> sp.	1 / 0
<i>Beraea</i>	6 / 2	<i>Cinclidotus aquaticus</i>	1 / 2
Bithyniidae	5 / 2	<i>Cinclidotus fontinaloides</i>	8 / 9
Blephariceridae	1 / 1	<i>Cladophora glomerata</i>	1 / 2
<i>Caenis belfiorei</i>	3 / 0	<i>Conocephalum conicum</i>	1 / 0
<i>Caenis macrura</i>	1 / 0	<i>Diatoma vulgare</i>	2 / 2
<i>Capnioneura</i>	3 / 0	<i>Elodea canadensis</i>	1 / 0
Ceratopogonidae	6 / 7	<i>Fissidens viridulus</i>	6 / 5
Chironomidae	11 / 11	<i>Fontinalis antipyretica</i>	0 / 1
<i>Chloroperla</i>	0 / 4	<i>Hydrurus foetidus</i>	1 / 0
<i>Crunoecia</i>	1 / 0	<i>Hygroamblystegium</i>	1 / 0
Dendrocoelidae	1 / 0	<i>fluviatile</i>	3 / 1
<i>Dinocras</i>	7 / 6	<i>Hygroamblystegium tenax</i>	0 / 1
Dixidae	3 / 1	<i>Kyliniella</i> sp.	0 / 1
Dryopidae	2 / 0	<i>Lemanea fluviatilis</i>	0 / 1
Dytiscidae	2 / 0	<i>Leptodictyum riparium</i>	1 / 2
<i>Ecdyonurus helveticus</i>	2 / 0	<i>Lunularia cruciata</i>	1 / 0
<i>Ecdyonurus venosus</i>	8 / 9	<i>Lyngbya aestuarii</i>	2 / 0
Elminthidae	9 / 9	<i>Lyngbya</i> sp.	7 / 7
Empididae	3 / 1	<i>Marchantia polymorpha</i>	1 / 0
<i>Epeorus sylvicola</i>	5 / 6	<i>Melosira varians</i>	1 / 5
<i>Epeorus yugoslavicus</i>	2 / 0	<i>Mentha aquatica</i>	1 / 1
Ephydriidae	1 / 0	<i>Microspora amoena</i>	3 / 3
Gammaridae	8 / 8	<i>Mougeotia</i> sp.	1 / 2
Gyrinidae	1 / 2	<i>Nasturtium officinale</i>	3 / 0
<i>Glossosoma</i>	3 / 3	<i>Nostoc punctiforme</i>	0 / 1
<i>Habrophlebia eldae</i>	1 / 2	<i>Oedogonium</i> sp.	1 / 1
Haemopidae	4 / 3	<i>Orthotrichum stramineum</i>	1 / 2
Haliplidae	1 / 0	<i>Oscillatoria amoena</i>	4 / 3
Hydracarinae	6 / 9	<i>Oscillatoria limosa</i>	1 / 0
Hydraenidae	7 / 6	<i>Oscillatoria</i> sp.	1 / 1
Hydrophilidae	1 / 1	<i>Pellia endiviifolia</i>	0 / 2
<i>Hydropsiche</i>	8 / 6	<i>Phormidium valderianum</i>	1 / 0
Hydroptilidae	0 / 1	<i>Plagiomnium affine</i>	2 / 3
Hyrudinidae	8 / 6	<i>Plagiomnium undulatum</i>	2 / 2
<i>Isoptera</i>	7 / 7	<i>Plathypnidium riparioides</i>	2 / 2
<i>Lasiocephala</i>	1 / 0	<i>Potamogeton crispus</i>	1 / 1
<i>Lepidostoma</i>	3 / 1	<i>Potamogeton pectinatus</i>	4 / 3
<i>Leuctra</i>	8 / 8	<i>Potamogeton trichoides</i>	1 / 0
<i>Limnephilus</i>	2 / 2	<i>Ranunculus trichophyllus</i>	1 / 2
Limoniidae	8 / 6	<i>Sparganium erectum</i>	2 / 0
Lumbricidae	9 / 8	<i>Spirogyra communis</i>	1 / 1

Macroinvertebrates	No. site in Oct 2008 / Jun 2009	Macrophytes	No. site in Oct 2008 / Jun 2009
<i>Lymnaeidae</i>	5 / 0	<i>Spirogyra</i> sp.	3 / 1
<i>Micrasema</i>	8 / 1	<i>Stigeoclonium tenue</i>	1 / 1
<i>Naididae</i>	3 / 8	<i>Ulothrix zonata</i>	8 / 6
<i>Nemura</i>	2 / 1	<i>Ulva flexuosa</i>	6 / 5
<i>Odontocerum</i>	2 / 3	<i>Vaucheria geminata</i>	3 / 2
<i>Perla</i>	5 / 5	<i>Veronica anagallis-aquatica</i>	1 / 0
<i>Philopotamus</i>	4 / 1	<i>Veronica beccabunga</i>	0 / 1
<i>Physidae</i>	3 / 1	<i>Zannichellia palustris</i>	
<i>Piralidae</i>	0 / 1	<i>Zygnema</i> sp	
<i>Planariidae</i>	9 / 5		
<i>Polycentropus</i>	2 / 1		
<i>Protonemura</i>	4 / 3		
<i>Psychodidae</i>	3 / 3		
<i>Rhyacophila</i>	9 / 9		
<i>Rhithrogena hybrida</i>	6 / 6		
<i>Rhithrogena</i>	6 / 9		
<i>semicolorata</i>	1 / 0		
<i>Scirtidae</i>	6 / 2		
<i>Sericostoma</i>	6 / 9		
<i>Serratella ignita</i>	9 / 9		
<i>Simuliidae</i>	1 / 0		
<i>Sphaeriidae</i>	5 / 6		
<i>Stratiomyidae</i>	0 / 1		
<i>Synagapetus</i>	0 / 2		
<i>Tabanidae</i>	0 / 1		
<i>Taeniopteryx</i>	6 / 0		
<i>Tipulidae</i>	2 / 3		
<i>Tubificidae</i>	3 / 1		
<i>Wormaldia</i>			